

DEEPWATER

The Integrated Deepwater System Program



INTEGRATED COAST GUARD SYSTEMS

DEEPWATER

ASNE Presentation

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Agenda



- **Current Assessment**
- **Solution – IDS**
- **Program Status**
- **Homeland Security Strategy**
- **Cutter Characteristics**
- **Cutter Certification Plan**
- **IDS/DDX/LCS Intersection**
- **Conclusion**

21st Century Environment



Impact: Studies predict an increase in the nation's reliance on the Coast Guard.

Current Coast Guard Capabilities



1985-2005

17 yrs



1984-2004

18 yrs



1972-1997

30 yrs



1965-2008

37 yrs



1964-2007

38 yrs



1990-2005

12 yrs



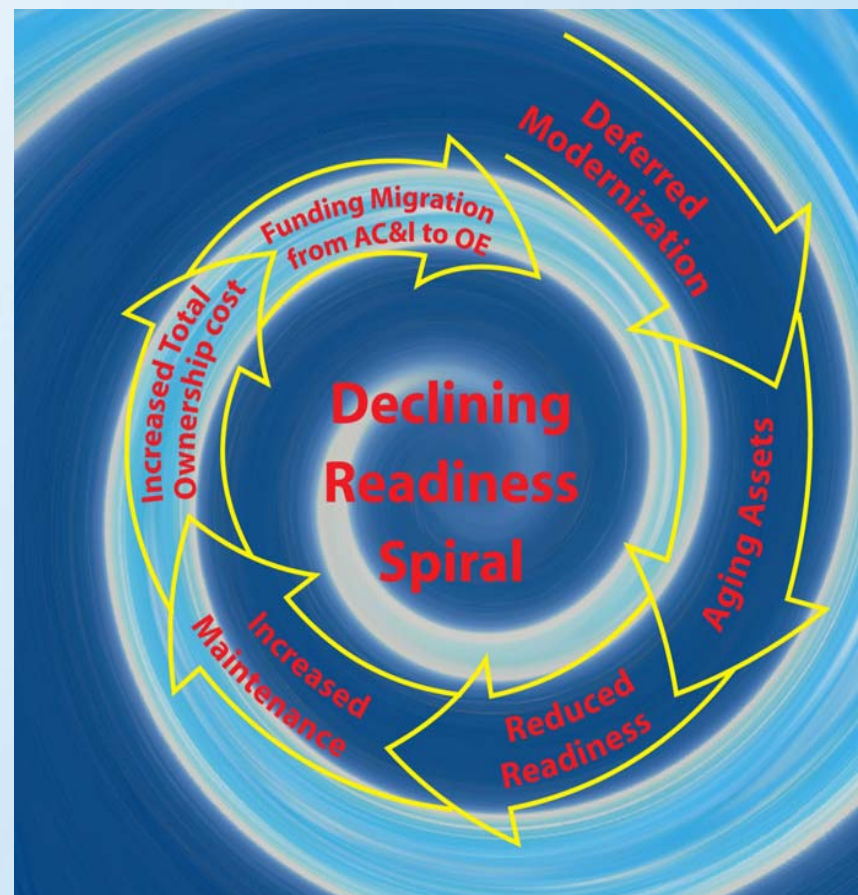
1982-2002

20 yrs



1982-2013

28 yrs



Year First
Commissioned

Expiration of Planned
Service Life

Solution: Integrated Deepwater System



Performance Based:

- Focus on capabilities not assets

Acquisition Strategy:

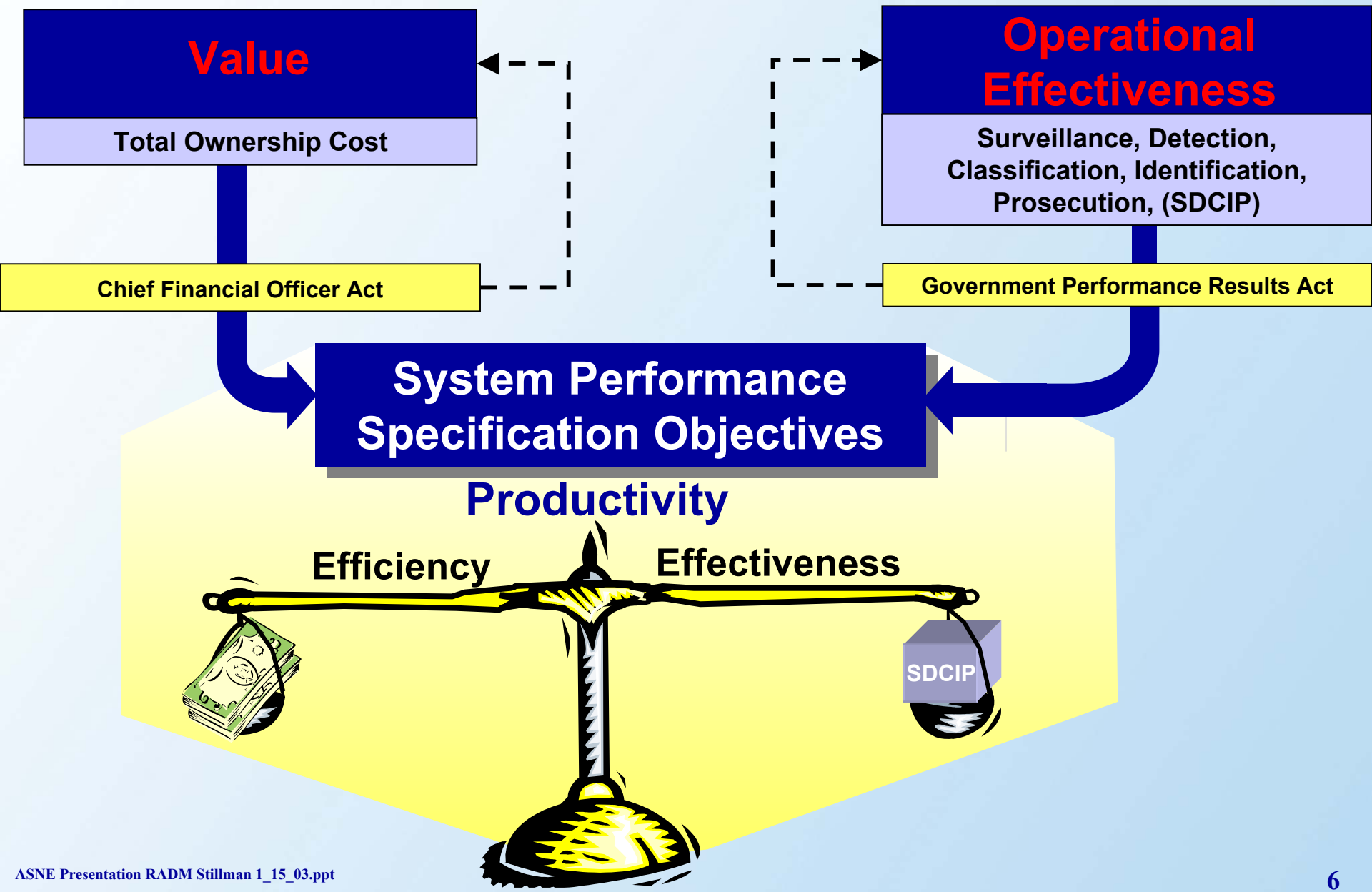
- **Partner** with system integrator
- Acquire **integrated system of** surface, air, C4ISR, and logistics **systems**



Overarching Objective:

- **Maximize Operational Effectiveness while Minimizing Total Ownership Costs**

Performance Based Acquisition



System Solution – Network Centric



System of Systems

System Solution – Assets



Maritime Patrol Aircraft (MPA)



High Altitude Endurance UAV



HC-130



VTOL Unmanned Air Vehicle (UAV)



VTOL Recovery and Surveillance Aircraft



Multi-Mission Cutter Helicopter

Offshore Patrol Cutter (OPC)



National Security Cutter (NSC)



Fast Response Cutter (FRC)



Modified 123' Patrol Boat



Short Range Prosecutor



Long Range Interceptor



Program Status



- Contract awarded 25 June 2002 to Integrated Coast Guard Systems (ICGS), a joint venture between Lockheed Martin and Northrop Grumman.
- ICGS is a fully integrated team that is ready to commence re-capitalization of USCG assets

LOCKHEED MARTIN



NORTHROP GRUMMAN

ARINC

Bell Agusta Aerospace Corp.

Bell Helicopter Textron

EADS CASA

EADS Eurocopter

Halter – Bollinger

L3 Communications

LM Management & Data Systems

LM Technology Services

M. Rosenblatt & Sons

Northrop Grumman Full Service Operations

Northrop Grumman IT

PROSOFT

United Defense, LP

People, Performance, and Partnership

Homeland Security Strategy



Comprehensive National Strategy



Deepwater Mission Task Sequence

Surveil

Detect

Classify

Identify

Prosecute



Coast Guard Maritime Homeland Defense Strategy

Conduct layered maritime security operations

Establish & maintain a baseline level of maritime security

Strengthen the port security posture

Build & leverage Maritime Domain Awareness

Develop required capabilities, improve core competencies & recapitalize the CG

Organize & sustain a public private sector partnership; increase international partnership

Prepare, equip & train forces to transition between & conduct HLS & HLD ops



National Strategy for Homeland Defense

Prevent Terrorist Attacks within the United States

Reduce America's Vulnerability to Terrorism

Minimize the Danger and Recover from the Attacks that do Occur

Homeland Security Requirements



Security Framework

**Maritime
Homeland Security**

Pillars
Of
Performance

Surveillance

Detection

Classification

Identification

Prosecution

Foundation

Maritime Domain Awareness

Network Centric - System of Systems

People, Partnership, Performance

Global Mission Execution

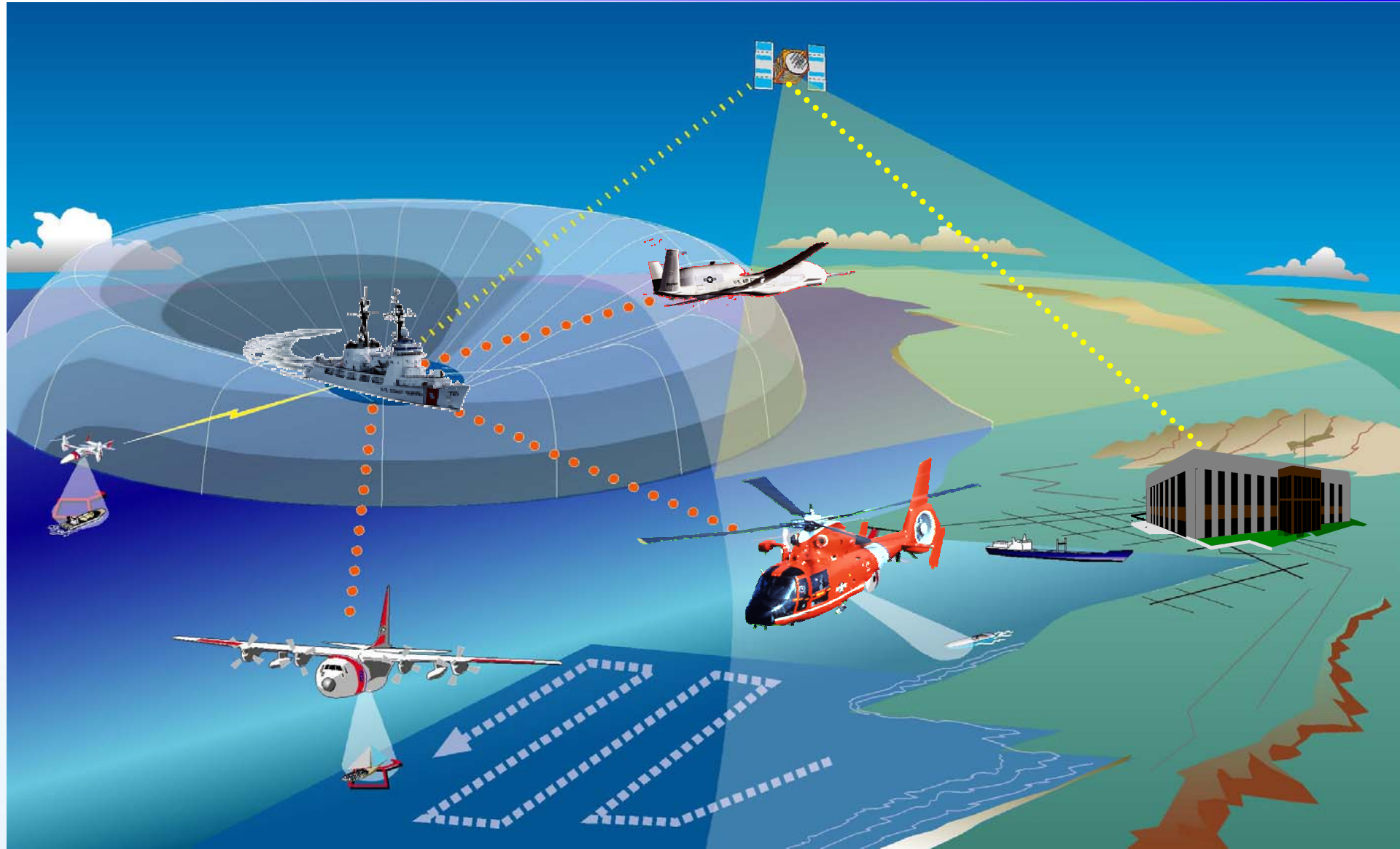


CGC Boutwell being deployed to the Middle East



Coast Guard cutters conduct maritime-intercept operations, carry out peacetime-engagement missions, and perform other essential warfare tasks for all three forward-deployed Navy fleets: the Fifth Fleet in the Arabian Gulf/Middle East; the Sixth Fleet in the Mediterranean; and the Seventh Fleet in the Western Pacific. However, the Coast Guard deepwater fleet is aging and in urgent need of replacement.

Maritime Domain Awareness



Fully Interoperable C4ISR Network-Centric Architecture

123' WPB Characteristics

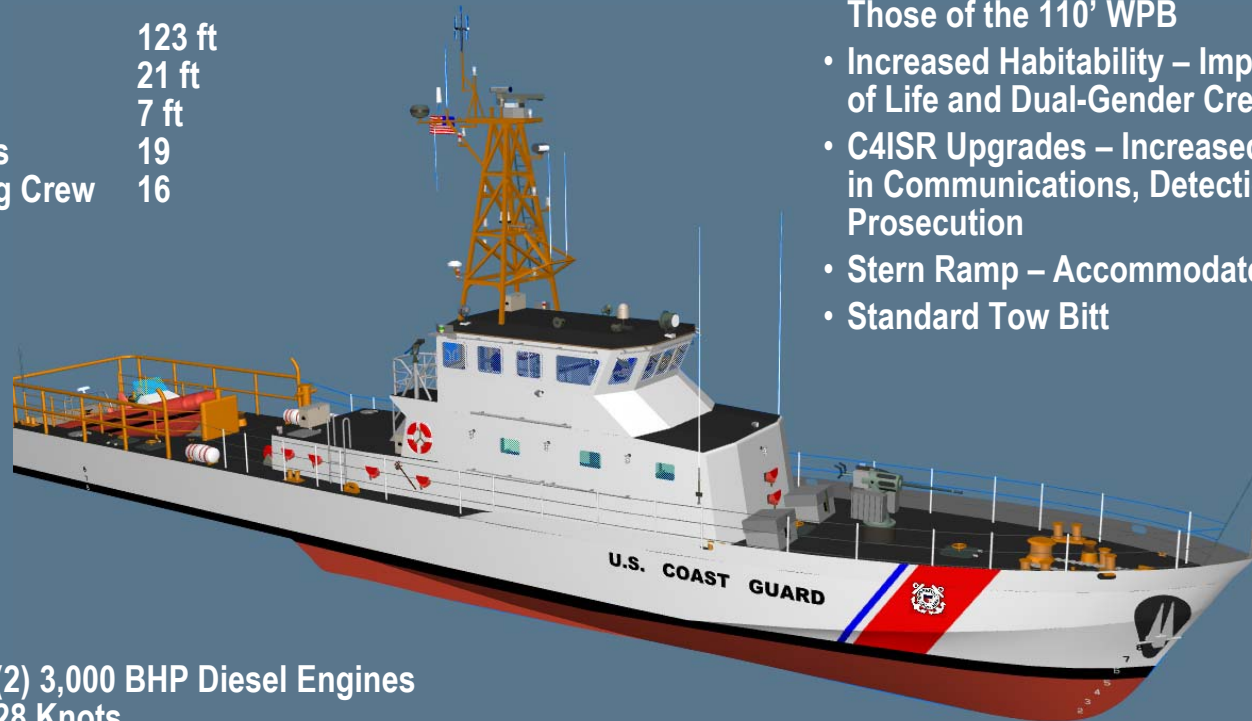


123' Patrol Boat (Legacy 110' SLEP) [Delivery 2003–2010]

General Characteristics:

Overall Length	123 ft
Maximum Beam	21 ft
Draft, Full Load	7 ft
Accommodations	19
Typical Operating Crew	16

- Performance — Endurance, Speed, and Sea keeping of the 123' Comparable to Those of the 110' WPB
- Increased Habitability – Improved Quality of Life and Dual-Gender Crew Capable
- C4ISR Upgrades – Increased Capabilities in Communications, Detection, Prosecution
- Stern Ramp – Accommodates 1 SRP
- Standard Tow Bitt



Propulsion	(2) 3,000 BHP Diesel Engines
Max Speed	28 Knots
Endurance	5 Days
Displacement	A/B/C Class 174/164/162 LT
Range	3180/3380/3300 nm

National Security Cutter Characteristics



National Security Cutter [Delivery 2006 – 2013]

Endurance/Range	60 Days / 12,000 nmi	Length	421 ft, LOA
Fuel	650 tons	Beam	54 ft
Crew, OFF/CPO/ENL	18/12/88	Draft	20.9 ft
Propulsion Plant	CODAG	Displacement	3,886 tons, Full Load
Electric Plant	2 SSDGs + 1 Emergency Gen	Speed	28.1 kts (Sustained at 85% MCR)
Ship Control	Integrated Bridge		29.1 kts (Max at 100% MCR)

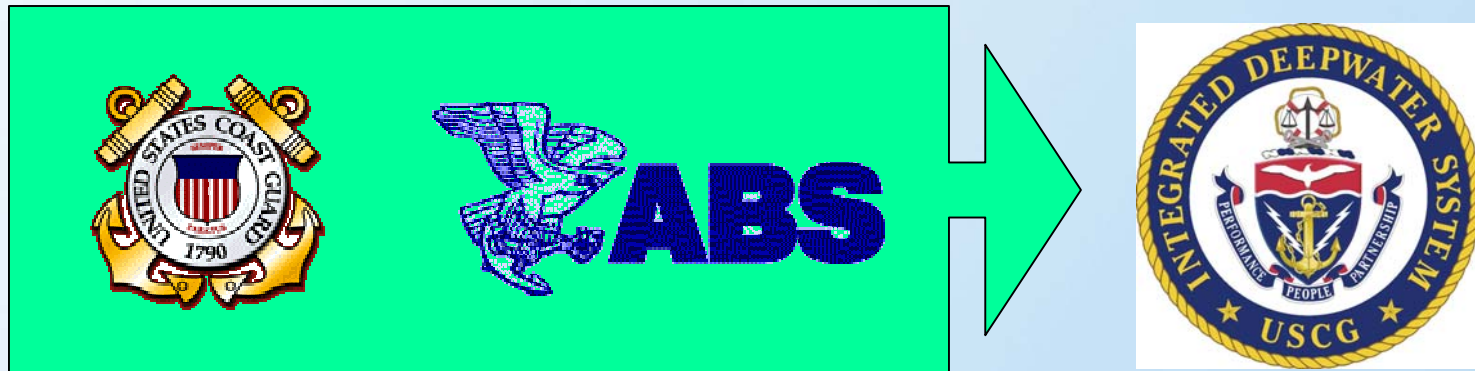


Cutter Certification Plan



American Bureau of Shipping and the contractors provide flexibility in the selection of Standards for cost-effective IDS solutions

The Generic Certification Matrix presents the standards that serve as the basis for development of the Cutter Specific Certification Matrix



What do we expect from CG/ABS Team?



GENERIC LIST (MATRIX) OF STANDARDS FOR DESIGN & CONSTRUCTION

- Our technical experts work with ABS technical experts.
- A compilation of standards organized by Work Breakdown Structure.
- Inclusion of commercial standards to replace out-dated military standards.
- We invited Industry input during development.

IMPLEMENTATION PLAN

- Instructions which guide Industry to develop a Ship-Specific set of standards from the “Generic Certification Matrix”

MAINTENANCE PLAN

- A plan for maintaining the Generic List of Standards over the coming years to ensure currency

IDS/DDX/LCS Common Interests



The Way Ahead



- **Combat Systems Support (NSC)**
- **Open Architecture**
- **LCS Interaction**
 - **Modularity**
 - **CAIV**
 - **Communications**
 - **Scaleability**
- **Supportability**
 - **Shared life cycle support**

Why Deepwater?



- Secures the Homeland by providing improved Maritime Security and Safety
- Enables the Coast Guard to
 - Maintain credible presence in key maritime regions to deter potential threats to U.S. sovereignty
 - Right way to achieve complex goals through public – private partnership
- Provides Nation best national security, military, law enforcement, and search & rescue capability for taxpayer's dollar
- Ensures USCG remains best CG in the world – military, multimission, maritime, mobile, agile and flexible

Vision Statement:

“Keeping the U.S. Coast Guard the world’s best...properly equipped and fully prepared to meet every maritime challenge of the 21st Century.”

“Our men and women in uniform deserve the best weapons, the best equipment, the best training...”

President George W. Bush
State of the Union Address
January 2002

“The Budget for Fiscal Year 2004 will continue to support the recapitalization of the U.S. Coast Guard’s aging fleet, as well as targeted improvements in the areas of maritime domain awareness, command and control systems, and shore-side facilities.”

Excerpt from the President’s
National Homeland Security Strategy

Visit us on the web at <http://www.uscg.mil/deepwater>